

PATENTS: Amendment

AMENDMENTS TO THE SPECIFICATION

Please replace original paragraph [0005], originally on page 4, with the following amended paragraph [0005]:

[0005] The United States Navy has developed historical and empirical estimates of stowage aid weights and storage compartment volumes needed to store many common ship stores. These estimates often relate to numbers of people or specific types of subsystems existing on typical naval vessels. Generally, the estimated stowage requirements are based on reports, or technical standards, that provide the current volume and related density of shipboard stowage, such as food (e.g., frozen, chill, dry) required per day for each type of crewmember onboard (e.g., officer, CPO, enlisted). Other associated accommodation stowage influences include medical supplies, special clothing, canned soda, and ship store condiments. Often stowage demands are based on mechanical systems [,,] which that require lubrication, such as the number and type of aircraft and small boats onboard.

Please replace original paragraph [0010], originally on page 6, with the following amended paragraph [0010]:

[0010] A typical computer program product in accordance with the present invention is for residence in memory of a computer wherein the computer program product is for evaluating what is required for storing items and comprises a computer useable medium having computer program logic recorded thereon. The computer program logic includes: (a) means for enabling access to information as to the capabilities of differently sized compartments to accommodate

Serial No. 10/826,790
Page 2 of 29

PAGE 3/30 * RCVD AT 7/10/2009 7:26:59 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/39 * DNI:2738300 * CSID:3012271968 * DURATION (mm:ss):03:42

PATENTS: Amendment

stowage aids, each compartment being characterized by an individual floor area and individual floor dimensions, the information including indication of different accommodative capabilities in at least two compartments that are characterized by the same individual floor area but different individual floor dimensions; and, (b) means for enabling determination of at least one relationship between a total amount of stowage aids and a total floor area accommodative of the total amount of stowage aids. According to many such inventive embodiments, the total amount of stowage aids is of said stowage aids of at least one selected type. The information pertains to each of at least one type of stowage [[aids]] aid. Each compartment is characterized by a portion of the individual floor area that is unsuitable for situation thereupon of the stowage aids. The different accommodative capabilities are associated with the respective natures of the corresponding unsuitable portions. The unsuitability is associated with (i) accessibility to the stowage aids in the compartment, and/or (ii) functional clearance of the stowage aids in the compartment.

Please replace original paragraph [0022], originally on page 12, with the following amended paragraph [0022]:

[0022] The inventive method steps can be performed human-computationally and/or machine-computationally (e.g., using one or more computer systems such as embodied in a personal computer or computer workstation). According to many inventive embodiments, a computer system implements inventive software such as that which is set forth herein in the instant disclosure's Computer Program Listing Appendix. The computer system will typically include at least one processor, random access memory, mass data storage means (e.g., hard disk

Serial No. 10/826,790

Page 3 of 29

drive and/or removable storage drive), and a human-machine interface (including a display, keyboard, and a graphical pointing device like a mouse). A communications infrastructure may be available for connection with the processor(s).

Please replace original paragraph [0051], originally on pages 25-27, with the following amended paragraph [0051]:

[0051] Typical inventive algorithms can be described in basic terms as performing steps, in various sequences, including some, for Option 1, or all of the following for Option 2 of SSAAP:

- (1) Based on historical U.S. Navy supply stowage requirements and/or user-defined input requirements, the total volume of stowage items requiring storage is estimated, for each storeroom type.
- (2) Dividing the volume found in step (1) by the percentage of each stowage aid being specified for the target storeroom type, the total volume for each stowage aid type is determined.
- (3) The total volume of stowage items, for each stowage aid specified, found in step (2) is divided by the net volume of the stowage aid of interest, thereby obtaining an initial estimate of the total number of stowage aids required, for each stowage aid type.
- (4) The results of step (3) are multiplied by the gross foot print "floor" area of the associated stowage aid to estimate the initial required deck area required for each

stowage aid type specified.

(5) Summing the results of step (4) for each of the stowage aids utilized within the storeroom type in question, an initial estimate is made of the total storeroom area required to store the total volume of stowage items found in step (1).

(6) Based on the selected ship type, historical ship data is retrieved from a data matrix, according to the storeroom type(s) (SSCS groups) and their specified longitudinal location percentages (%-fwd / %-mid / %-aft), regarding the average historical storeroom area and its matching compartment W/L ratio.

(7) The specified storeroom longitudinal location percentages are used in combination with the average storeroom area and W/L ratio (by type), identified in step (6), to estimate the initial CUF for longitudinal length zone (i.e., fwd/mid/aft), for each stowage aid type utilized.

(8) Multiplying the areas calculated in step (4) for each stowage aid type, by the longitudinal location percentage specified for each storeroom type, the amount of area is determined for each aid type located in the forward/amidships/aft thirds of the ship.

(9) Dividing the longitudinal zoned areas from step (8) by their associated Storeroom CUFs from step (7), the required area (by longitudinal length zone) is yielded for each stowage aid.

(10) Summing the items in step (9), a refined estimate is provided of the total storeroom area needed, by storeroom type. However, this estimate is premised on the definition of a CUF having only one storeroom entrance area (3 feet by 3 feet). Further,

Serial No. 10/826,790
Page 5 of 29

there may be many such storerooms on the subject ship, based upon historical observations.

(11) By summing the areas of step (9) for each longitudinal length zone zones (i.e. Fwd/Mid/Aft), an initial estimate is obtained of the area needed in each third of the ship's length, for each storeroom type.

(12) Dividing the zonal area identified in step (11) by the historical storeroom area identified in step (6), the total number of storerooms, of each storeroom type, by longitudinal location, is developed.

(13) Logic is used to check if the area required in each of the longitudinal zones is sufficient to contain at least one of the standard storerooms storeroom identified in step (6), where the user-defined percentage is greater than zero. Should insufficient area be found to support a standard historical average storeroom area, by zone, the zone is then assumed to contain no storerooms of the specified type. The associated area is added to the next adjacent storeroom zone, and the process of comparison is repeated, until all three longitudinal zones have been reviewed for compliance. At least one storeroom of each type, identified as containing some stowage, is assumed located at the longitudinal location that contains the highest percentage of longitudinal location (defaults to amidships if not distinguishable), unless there should be less area specified in step (5) than is present in a single historical storeroom area identified by step (6). At a minimum, there exists one storeroom type of size equal to the summed area of step (5) divided by the historical matching CUF for the longitudinal location that best estimates the storeroom location, as identified above.

Serial No. 10/826,790
Page 6 of 29

PAGE 7/30 * RCVD AT 7/10/2009 7:26:59 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/39 * DNIS:2738300 * CSID:3012271968 * DURATION (mm:ss):03:42

PATENTS: Amendment

(14) The total number of storerooms found in step 12 [(13)] and refined in step [(14)] 13, minus 1, is then multiplied times 9 sq-ft (to account for the 3 foot by 3 foot entranceway used to develop the definition of storeroom stowage aid CUFs). The result is then added to the initial storeroom area estimate found in step [(12)] 11, thereby obtaining the "gross arrangeable deck area required," viz., a final estimate of the total storeroom area required to store the total volume of stowage items found in step (1).

Serial No. 10/826,790
Page 7 of 29

PAGE 8/30 * RCVD AT 7/10/2009 7:26:59 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/39 * DMS:2738300 * CSID:3012271968 * DURATION (mm:ss):03:42